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Form PTO 1449

ATTY DOCKET NO. 32-95D

SERIAL NO. 09/911,569

FILING DATE July 23, 2001

APPLICANT Hawley-Nelson et al.

GROUP 163 1636

U.S. PATENT DOCUMENTS

Exmr. Initial	Document Number	Date	Name	Class	Subclass	Filing Date if Appropriate
JD	5,795,587	08/18/98	Gao et al.	424	450	
	4,946,787	08/07/90	Eppstein et al.			
	5,736,392	04/07/98	Hawley-Nelson et al.			
	5,714,166	02/03/98	Tomalia et al.			
	5,166,320	11/24/92	Wu et al.	530	395	
	5,354,844	10/11/94	Beug et al.	530	345	
	5,574,142	11/12/96	Meyer, Jr. et al.	536	23.1	
	5,589,392	12/31/96	Short	435	320.1	
	5,266,106	11/30/93	Winnik et al.	106	22K	
	5,338,532	08/16/94	Tomalia et al.	424	149	
	5,527,524	06/18/96	Tomalia et al.	424	1.33	
	5,578,475	11/26/96	Jessee	435	172.5	
	5,587,441	12/24/96	Frechet et al.	526	238	
	5,587,446	12/24/96	Frechet et al.	526	3.33	
	5,560,929	10/01/96	Hedstrand et al.	424	486	
	5,334,761	08/02/94	Gebeyehu et al.	564	197	
	5,674,908	10/07/97	Haces et al.	574	642	
	5,532,142	07/02/96	Johnston et al.	435	69	
	5,198,423	03/30/93	Taguchi et al.	514	12	
JD	4,897,355	01/30/90	Eppstein et al.	435	240.2	

FOREIGN PATENT DOCUMENTS

	Document Number	Date	Country	Class	Subclass	Translation Yes/No
JD	WO 91/15501	17.10.91	PCT	C07H 21/02	C12N 5/00	
JD	WOA91/16024	31.10.91	PCT			

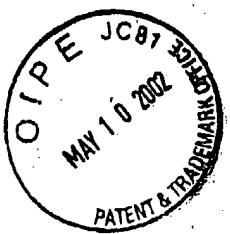
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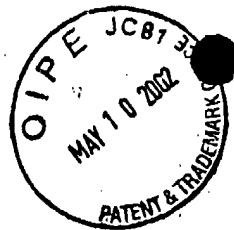
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APPLICANT Hawley-Nelson et al.		GROUP 1647 1030	

JD	3	WO92/13570	20.08.92	PCT			No
JD	4	WO93/07282	04.15.93	PCT			
JD	5	WO93/07283	04.15.93	PCT			
JD	6	WO93/19768	14.10.93	PCT			
JD	7	WO94/04696	03.03.94	PCT			
JD	8	WO94/23751	27.10.94	PCT			No
JD	9	WO95/02397	26.01.95	PCT			
JD	10	WO95/17373	29.06.95	PCT			
JD	11	WO95/24221	14.09.95	PCT			
JD	12	WO95/31557	23.11.95	PCT			
JD	13	WO96/01841	25.01.96	PCT			
JD	14	WO96/05218	22.02.96	PCT			
JD	15	WO96/10038	04.04.96	PCT			
JD	16	WO96/22321	25.07.96	PCT			
JD	17	WO96/22765	01.08.96	PCT			
JD	18	WO96/31549	10.10.96	PCT			No
JD	19	0 304 111 B1	30.07.88	EP			No
JD	20	0 359 347	21.03.90	EP			
JD	21	0 544 292	26.11.92	EP			
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OTHER PRIOR ART (including Author, Title, Date, Pertinent Pages, etc.)

JD	23	Aumailley, M. et al. (1989), "Cell Attachment Properties of Collagen Type VI and Arg-Gly-Asp Dependent Binding to its $\alpha_2$ (VI) and $\alpha_3$ (VI) Chains," <i>Exp. Cell Res.</i> 181:463-474.
JD	24	Behr, J.-P. et al. (1989), "Efficient gene transfer into mammalian primary endocrine cells with lipopolyamine-coated DNA," <i>Proc. Natl. Acad. Sci. USA</i> 86:6982-6986.
JD	25	Bielinska, A. et al. (1996), "Regulation of <i>in vivo</i> gene expression using antisense oligonucleotides or antisense expression plasmids transfected using starburst PAMAM dendrimers," <i>Nucl. Acids Res.</i> 24(11):2176-2182

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<i>JD</i>	<i>28</i>	Bonifaci, N. et al., (1995), "Nuclear translocation of an exogenous fusion protein containing HIV Tat requires unfolding," AIDS 9(9):995-1000
<i>JD</i>	<i>29</i>	Braunlin et al., "Equilibrium dialysis studies of polyamine binding to DNA," Biopolymers 21:1301-1314
<i>JD</i>	<i>28</i>	Carrasco, L. et al. (1982), "Modification of Membrane Permeability in Vaccinia Virus-Infected Cells," J. Virol. 117:62-69.
<i>JD</i>	<i>29</i>	Ciccarone et al. (1993), "Cationic Liposome-Mediated Transfection of Eukaryotic Cells: High Efficiency Nucleic Acid Delivery with Lipofectin, Lipofectace™, and Lipofectamine™ Reagents," FASEB J., Abstracts, 7(7):A1131, Abstract No. 454
<i>JD</i>	<i>30</i>	Ciccarone et al., "DMRIE-C reagent for transfection of suspension cells and for RNA transfections," Focus 17:84-87
<i>JD</i>	<i>31</i>	Cotton et al. (1992), "High-efficiency receptor-mediated delivery of small and large 48 kilobase gene constructs using the endosome-disruption activity of defective or chemically inactivated adenovirus particles," Proc. Natl. Acad. Sci. USA 89:6094-6098
<i>JD</i>	<i>32</i>	Curiel, D.T. et al. (1992), "High-Efficiency Gene Transfer Mediated by Adenovirus Coupled to DNA-Polylysine Complexes," Hum. Gene Therapy, 3:147-154
<i>JD</i>	<i>33</i>	Curiel, D.T. et al. (1991), "Adenovirus enhancement of transferrin-polylysine-mediated gene delivery," Proc. Natl. Acad. Sci. USA 88:8850-8854
<i>JD</i>	<i>34</i>	Dayhoff, M.O. et al. (1978), "Model of Evolutionary Change in Proteins," in <u>Atlas of Protein Sequence and Structure</u> , Vol. 5, Supp. 3, Chapter 22, pp. 345-352
<i>JD</i>	<i>35</i>	Dedhar, S. et al. (1987), "A Cell Surface Receptor Complex for Collagen Type I Recognizes the Arg-Gly-Asp Sequence," J. Cell Biol. 104:585-593.
<i>JD</i>	<i>36</i>	DeRobertis et al. (1978), "Intracellular migration of nuclear proteins in Xenopus oocytes," Nature 272:254-256
<i>JD</i>	<i>37</i>	Dingwall, C. and Laskey, R.A. (1991), "Nuclear targeting sequences - a consensus?" TIBS 16:478-481
<i>JD</i>	<i>38</i>	Epaard et al. (1992), "Peptide models for the membrane destabilizing actions of viral fusion proteins," Biopolymers 32:309-314
<i>JD</i>	<i>39</i>	Eytan, G.D. (1982), "Use of Liposomes for Reconstitution of Biological Functions," Biochem. Biophys. Acta 694:185-202

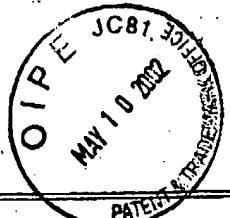
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<i>JD</i>	40	Fawell, S. et al. (1994), "Tat-mediated delivery of heterologous proteins into cells," Proc. Natl. Acad. Sci. USA <u>91</u> :664-668
<i>JD</i>	41	Felgner, P.L. and Ringold, G.M. (1989), "Cationic liposome-mediated transfection," Nature <u>337</u> :387-388
<i>JD</i>	42	Felgner, P.L. et al. (1987), "Lipofection: A highly efficient, lipid-mediated DNA-transfection procedure," Proc. Natl. Acad. Sci. USA <u>84</u> :7413-7417
<i>JD</i>	43	FitzGerald, D.J.P. et al. (1983), "Adenovirus-Induced Release of Epidermal Growth Factor and Pseudomonas Toxin into the Cytosol of KB Cells during Receptor-Mediated Endocytosis," Cell <u>32</u> :607-617
<i>JD</i>	44	Frankel, A.D. et al. (1989), "Activity of synthetic peptides from the Tat protein of human immunodeficiency virus type 1," Proc. Natl. Acad. Sci. USA <u>86</u> :7397-7401
<i>JD</i>	45	Friedlander, D.R. et al. (1988), "Functional Mapping of Cytotactin: Proteolytic Fragments Active in Cell-Substrate Adhesion," J. Cell Biol. <u>107</u> :2329-2340.
<i>JD</i>	46	Gao, X. and Huang, L. (1996), "Potentiation of Cationic Liposome-Mediated Gene Delivery by Polycations," Biochemistry <u>35</u> :1027-1036
<i>JD</i>	47	Gardner, J.M. and Hynes, R.O. (1985), "Interaction of Fibronectin with Its Receptor on Platelets," Cell <u>42</u> :439-448.
<i>JD</i>	48	Gould-Fogerite, S. et al. (1989), "Chimerasome-mediated gene transfer in vitro and in vivo," Gene <u>84</u> :429-438
<i>JD</i>	49	Grant, D.S. et al. (1989), "Two Different Laminin Domains Mediate the Differentiation of Human Endothelial Cells into Capillary-like Structures In Vitro," Cell <u>58</u> :933-943.
<i>JD</i>	50	Haensler, J. and Szoka, R. (1993), "Polyamidoamine Cascade Polymers Mediate Efficient Transfection of Cells in Culture," Bioconjugate Chem. <u>4</u> :372-379
<i>JD</i>	51	Hagstrom, J.E. et al. (1996), "Complexes of non-cationic liposomes and histone H1 mediate efficient transfection of DNA without encapsulation," Biochim. Biophys. Acta <u>1284</u> :47-55
<i>JD</i>	52	Haverstick, D.M. et al. (1986), "Inhibition of Platelet Adhesion to Fibronectin, Fibrinogen, and von Willebrand Factor Substrates by a Synthetic Tetrapeptide Derived From the Cell-Binding Domain of Fibronectin," Blood <u>86</u> (4):946-952.
<i>JD</i>	53	Hawley-Nelson, P. et al. (1993) FOCUS Vol. 15, 17pp
<i>JD</i>	54	Humphries, M.J. et al. (1986), "Identification of an Alternatively Spliced Site in Human Plasma Fibronectin That Mediates Cell Type-specific Adhesion," J. Cell Biol. <u>103</u> :2637-2647.

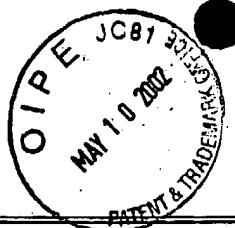
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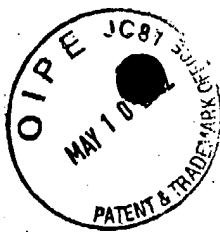
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JD	60	Humphries, M.J. et al. (1987), "Identification of Two Distinct Regions of the Type III Connecting Segment of Human Plasma Fibronectin That Promote Cell Type-specific Adhesion," <i>J. Biol. Chem.</i> <u>262</u> (14):6886-6892.
JD	57	Ito, A. et al. (1990), "Synthetic Cationic Amphiphiles for Liposome-Mediated DNA Transfection," <i>Biochem. Internat.</i> <u>22</u> (2):235-241.
JD	57	Kalderon et al. (1984), "A Short Amino Acid Sequence Able to Specify Nuclear Location," <i>Cell</i> <u>39</u> :499-509.
JD	58	Karnata, H. et al. (1994), "Amphiphilic peptides enhance the efficiency of liposome-mediated DNA transfection," <i>Nucl. Acids Res.</i> <u>22</u> (3):536-537.
JD	59	Kaneda et al. (1989), "Introduction and Expression of the Human Insulin Gene in Adult Rat Liver," <i>J. Biol. Chem.</i> <u>264</u> (21):12126-12129.
JD	60	Kaneda et al. (1987), "The Improved Efficient Method for Introducing Macromolecules into Cells Using HVJ (Sendai virus) Liposomes with Gangliosides," <i>Exp. Cell Res.</i> <u>173</u> :56-69.
JD	61	Kielian, J. and Helenius, A. (1986), "Entry of Alphaviruses," in <u>The Togaviridae and Flaviviridae</u> , Schlesinger & Schlesinger (eds.), Plenum Press, N.Y., pp. 91-119.
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JD	64	Konopka, K. et al. (1991), "Enhancement of human immunodeficiency virus type 1 infection by cationic liposomes: the role of CD4, serum and liposome-cell interactions," <i>J. Gen. Virol.</i> <u>72</u> :2685-2696.
JD	65	Kraaijeveld, S.A. et al. (1984), "The Effect of liposomal charge on the neutralizing antibody response against inactivated encephalomyocarditis and Simiki Forest Viruses," <i>Clin. Exp. Immunol.</i> <u>56</u> :509-514.
JD	66	Kukowska-Latallo, J.F. et al. (1996), "Efficient transfer of genetic material into mammalian cells using Starburst polyamidoamine dendrimers," <i>Proc. Natl. Acad. Sci. USA</i> <u>93</u> :4897-4902.
JD	67	Lanford et al. (1986), "Induction of Nuclear Transport with a Synthetic Peptide Homologous to the SV40 T Antigen Transport Signal," <i>Cell</i> <u>46</u> :575-582.

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<i>JD</i>	<i>b9</i>	Lapidot et al. (1990), "Fusion-Mediated Microinjection of Liposome-Enclosed DNA into Cultured Cells with the Aid of Influenza Virus Glycoproteins," <i>Exp Cell Res.</i> <u>189</u> :241-246
<i>JD</i>	<i>b9</i>	Lawler, J. et al. (1988), "Cell Attachment to Thrombospondin: The Role of ARG-GLY-ASP, Calcium, and Integrin Receptors," <i>J. Cell Biol.</i> <u>107</u> :2351-2361.
<i>JD</i>	<i>70</i>	Life Technologies Catalog, (1993) 10 pp.
<i>JD</i>	<i>71</i>	Liljstrom, P. and Garoff, H. (1991), "A New Generation of Animal Cell Expression Vectors Based on the Semliki Forest Virus Replicon," <i>Biotech.</i> <u>2</u> :1356-1361
<i>JD</i>	<i>72</i>	Mann, D.A. and Frankel, A.D. (1991), "Endocytosis and targeting of exogenous HIV-1 Tat protein," <i>EMBO J.</i> <u>10</u> (7):1733-1739
<i>JD</i>	<i>73</i>	Marsh et al. (1983), "Interactions of Simiki Forest Virus Spike Glycoprotein Rosettes and Vesicles with Cultured Cells," <i>J. Cell Biol.</i> <u>96</u> :455-461
<i>JD</i>	<i>74</i>	Mason, P.W. et al. (1994), "RGD sequence of foot-and-mouth disease virus is essential for infecting cells via the natural receptor but can be bypassed by an antibody-dependent enhancement pathway," <i>Proc. Natl. Acad. Sci. USA</i> <u>91</u> :1932-1936.
<i>JD</i>	<i>75</i>	Miyanohara, A. et al. (1998), "Partial Cell-Free Assembly of VSV-G Pseudotyped Retrovirus Particles," <i>Molecular and Cellular Biology of Gene Therapy Symposium, Keystone, Colorado, January 19-25, 1998, #007</i> , p. 34
<i>JD</i>	<i>76</i>	Murata et al. (1991), "Modification of the N-Terminus of Membrane Fusion-Active Peptides Blocks the Fusion Activity," <i>Biochem. Biophys. Res. Commun.</i> <u>179</u> (2):1050-1055
<i>JD</i>	<i>77</i>	Neugebauer, J. (1990), "Detergents: An Overview," <i>Meth. Enzymol.</i> <u>182</u> :239-253
<i>JD</i>	<i>78</i>	Otero, M.J. and Carrasco, L. (1987), "Proteins are Cointernalized with Virion Particles during Early Infection," <i>J. Virol.</i> <u>160</u> :75-80
<i>JD</i>	<i>79</i>	Pastan, I.H. and Willingham, M.C. (1981), "Journey to the Center of the Cell: Role of the Receptosome," <i>Science</i> <u>214</u> :504-509
<i>JD</i>	<i>80</i>	Pepinsky, R.B. et al. (1994), "Specific Inhibition of a Human Papillomavirus E2 Trans-Activator by Intracellular Delivery of Its Repressor," <i>DNA and Cell Biology</i> <u>13</u> (10), Mary Ann Liebert, Inc., Publishers, pp. 1011-1019
<i>JD</i>	<i>81</i>	Phalen et al. (1991), "Cholesterol is Required for Infection by Semliki Forest Virus," <i>J. Cell Biol.</i> <u>112</u> (4):615-623

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JD	82	Pierschbacher, M.D. and Ruoslahti, E. (1987), "Influence of Stereochemistry of the Sequence Arg-Gly-Asp-Xaa on Binding Specificity in Cell Adhesion," <i>J. Biol. Chem.</i> <u>262</u> (36):17294-17298.
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JD	84	Pinnaduwage, P. et al. (1989), "Use of a quaternary ammonium detergent in liposome mediated DNA transfection of mouse L-cells," <i>Biochim. Biophys. Acta</i> <u>985</u> :33-37
JD	85	Promega Catalog, p. 251
JD	86	Remy et al. (1995), "Targeted gene transfer into hepatoma cells with lipopolyamine-condensed DNA particles presenting galactose ligands: A stage toward artificial viruses," <i>Proc. Natl. Acad. Sci. USA</i> <u>92</u> :1744-1748
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JD	90	Rosenthal, A.F. and Geyer, R.P. (1960), "A Synthetic Inhibitor of Venom Lecithinase A," <i>J. Biol. Chem.</i> <u>235</u> (8):2202-2206
JD	91	Ruoslahti, E. and Pierschbacher, M.D. (1987), "New Perspectives in Cell Adhesion: RGD and Integrins," <i>Science</i> <u>238</u> :491-497.
JD	92	Sands, J.A. (1986), "Virucidal Activity of Cetyltrimethylammonium Bromide Below the Critical Micelle Concentration," <i>FEMS Microbiol. Lett.</i> <u>36</u> :261-263
JD	93	Scheule (1986), "Novel Preparation of Functional Sindbis Virosomes," <i>Biochemistry</i> <u>25</u> :4223-4232
JD	94	Schlegel, R. et al. (1983), "Inhibition of VSV Binding and Infectivity by Phosphatidylserine: Is Phosphatidylserine a VSV-Binding Site?" <i>Cell</i> <u>32</u> :639-646
JD	95	Schlegel, R and Wade, M. (1985), "Biologically Active Peptides of the Vesicular Stomatitis Virus Glycoprotein," <i>J. Virol.</i> <u>53</u> (1):319-323

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9D	96	Seth, et al., "Pathway of Adenovirus Entry into Cells," (1986) in <u>Virus Attachment and Entry into Cells</u> , Crowell, R.L. and Lonberg-Holm, K. (eds.), Am. Soc. Microbiology, Washington, pp. 191-195
9D	97	Stegmann, T. et al. (1989), "Protein-mediated membrane fusion," Ann. Rev. Biophys. Biophys. Chem. 18:187-211.
9D	98	Suzuki, S. et al. (1985), "Complete amino acid sequence of human vitronectin deduced from cDNA. Similarity of cell attachment sites in vitronectin and fibronectin," EMBO J. 4(10):2519-2524.
9D	99	Tang, M.X. et al. (1996), "In Vitro Gene Delivery by Degraded Polyamidoamine Dendrimers," Bioconjugate Chem. 7:703-714
9D	100	Tikchonenko, T. et al. (1988), "Transfer of condensed viral DNA into eukaryotic cells using proteoliposomes," Gene 63:321-330
9D	101	"Transfection Reagent," Genet. Eng. News (15 June 1993), P. 12, column 4
9D	102	Väänänen et al., (1980), "Fusion and Haemolysis of Erythrocytes Caused by Three Togaviruses: Semliki Forest, Sindbis, and Rubella," J. Gen. Virology 46:467-475
9D	103	Vives, E. et al. (1997), "A Truncated HIV-1 Tat Protein Basic Domain Rapidly Translocates through the Plasma Membrane and Accumulates in the Cell Nucleus," J. Biol. Chem. 272(25):16010-16017.
9D	104	Wagner, E. et al. (1992), "Coupling of adenovirus to transferrin-polylysine/DNA complexes greatly enhances receptor-mediated gene delivery and expression of transfected genes," Proc. Natl. Acad. Sci. USA 89:6099-6103
9D	105	Wagner, E. et al. (1992), "Influenza virus hemagglutinin HA-2 N-terminal fusogenic peptides augment gene transfer by transferrin-polylysine-DNA complexes: Toward a synthetic virus-like gene-transfer vehicle," Proc. Natl. Acad. Sci. USA 89:7934-7938
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9D	107	Wayner, E.A. et al. (1989), "Identification and Characterization of the T-Lymphocyte Adhesion Receptor for an Alternative Cell Attachment Domain (CS-1) in Plasma Fibronectin," J. Cell Biol. 109:1321-1330.
9D	108	Wickham, T.J. et al. (1995), "Targeting of adenovirus penton base to new receptors through replacement of its RGD motif with other receptor-specific peptide motifs," Gene Therapy 2:750-756.
9D	109	Yoshimura et al. 91993), "Adenovirus-mediated Augmentation of Cell Transfection with Unmodified Plasmid Vectors," J. Biol. Chem. 268:2300

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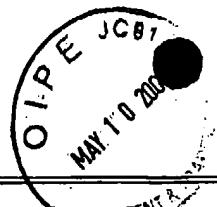


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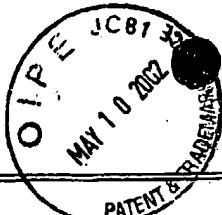
## U.S. PATENT DOCUMENTS

Exmr. Initial		Document Number	Date	Name	Class	Subclass	Filing Date if Appropriate
GD		5,906,922	05/25/99	Whittaker et al.	435	69.1	
		5,854,224	12/29/98	Lockett et al.	514	44	
		5,837,533	11/17/98	Boutin	435	320.1	
		5,773,527	06/30/98	Tomalia et al.	525	417	
		5,759,805	06/02/98	Feldhaus et al.	435	69.1	
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		5,670,347	09/23/97	Gopal	435	172.1	
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✓		5,583,198	12/10/96	Whittaker	530	345	
GD		5,547,932	08/20/96	Curiel et al.	435	65	

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GD	15	WO 90/09786	07.09.90	PCT	A61K	31/00	
GD	16	WO 92/22635	23.12.92	PCT	A61K	47/48	
GD	17	WO 91/07947	13.06.91	PCT	A61K	9/08	
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GD	19	WO 92/21752	10.12.92	PCT	A61K	35/20	
GD	20	WO 93/05162	18.03.93	PCT	C12N	15/63	
GD	21	WO 91/04753	18.04.91	PCT	A61K	47/48	

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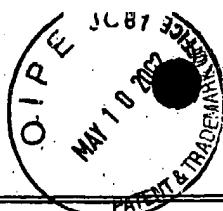
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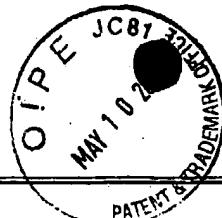
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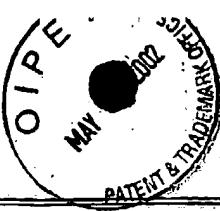
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